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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,099	03/22/2001	Masanori Ikari	010270	2044

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EXAMINER

NGUYEN, THU V

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/814,099

Applicant(s)

IKARI, MASANORI

Examiner

Thu Nguyen

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 4-10 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3 and 11-13 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed on August 23, 2004 has been entered. By this amendment, claims 1 have been amended, claims 4-10 have been withdrawn from consideration. All claims 1-13 are now pending in the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanamoto et al (US 5,356,259).

As per claim 1, Hanamoto teaches a working unit control apparatus of an excavating and loading machine in which a controller outputting a boom control command value to the boom control valve on the basis of the boom lever operating amount and a bucket control command value on the basis of the bucket lever operating amount (col.13, lines 38-53; col.14, lines 19-66); Hanamoto further teaches a load judging portion (col.16, lines 39-40, lines 42-47), and starting excavation when boom lever is operated and the load judging portion judges that the vehicle is under excavation (col.9, lines 20-37, lines 23-25; col.16, lines 42-61). Moreover, since Hanamoto teaches a hydraulic working unit (fig.2), Hanamoto obviously teaches the well known boom cylinder, boom control valve, boom lever, boom lever operating amount detector, bucket

Art Unit: 3661

cylinder, bucket control valve; bucket lever, bucket lever operating amount detector that are well known to be included in the hydraulic working machine as claimed. Hanamoto does not explicitly teach an excavating state detecting means. However, since Hanamoto teaches the capability to recognize the user operation on the pedal 10 (fig.1) for automatic excavating mode (col.16, lines 39-42) and detecting the start of excavation when the pump pressure has exceed a value J (col.16, lines 42-46), and since including a means (specifically, sensors) for detecting the level of operation on the pedal or the pressure of the pump would have been known, connecting the sensors to the controller that determines start of excavation based on the data from sensors reporting the operation of the pedal and the pressure of the pump in order to determine excavation state of the vehicle would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Allowable Subject Matter

3. Claims 2-3, 11-13 are allowed.
4. The following is an examiner's statement of reasons for allowance:

Prior art of record does not disclose a working unit control apparatus of an excavating and loading machine set forth claims 2-3, 11-13. Specifically, prior art of record does not teach the excavating machine that starts an automatic excavation control when the load judging portion judges that the vehicle is under excavation and the operating amount change judging portion judges that the boom lever operating amount changes from a predetermined operating amount to a zero amount. Moreover, prior arts of record does not teach a working machine having an excavating state detecting means that is constituted by a vehicle speed detector and engine

Art Unit: 3661

rotational speed detector, and a load judging portion the judges that the vehicle is under excavation when the vehicle speed is equal to or less than a value shown by a predetermined curve relating to the engine rotational speed. Further, prior art of record does not disclose an excavating machine having an excavating state detecting means that is constituted by an accelerator pedal operating amount detector that detects an accelerator pedal operating amount, and an engine rotational speed detector that detects an engine rotational speed; and a load judging portion that judges that the vehicle is under excavation when the accelerator pedal operating amount is equal to or more than a predetermined operating amount and the engine rotational speed is equal to or less than a predetermined rotational speed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

5. Applicant's arguments filed August 23, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument on page 18, on the "second" point of comment, the applicant relies on the "reason of allowance" stated by the examiner in the last office action issued on May 13, 2004 to prove that claim 1 should be allowable because claim 1 includes the load judging portion. However, the applicant should note that the section cited by the applicant

Art Unit: 3661

is just an incomplete portion of the examiner's reason for allowance statement, the applicant leaves off the important inventive feature stated in the statement, namely "and the operating amount change judging portion judges that the boom lever operating amount changes from a predetermined operating amount to a zero amount", the statement cited by the applicant in page 18 in the first paragraph is not the complete inventive feature that could overcome prior art's disclosure.

In response to applicant's argument on page 20, second and third paragraph, it is admit that Hanamoto teaches detecting the start of execution when the operation pedal is strodden by an operator as pointed out by applicant. It is noted that the features upon which applicant relies (i.e., the excavating state detecting means is operable and detectable for an excavating state of a vehicle while the vehicle is in operation) are not recited in the rejected claim 1. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As a comment, even if independent claim 1 includes the limitation that "the excavating state detecting means is operable and detectable for an excavating state of a vehicle while the vehicle is in operation", the teaching of Hanamoto in col.16, lines 38-47 clearly suggests including the limitation because from the disclosed col.16, lines 38-47, it is clear that the controller (which is the excavating state detecting means) must constantly in operating and monitoring state to monitor the data report of the position of the pedal and the pressure of the pump to determine if the vehicle starts (or is in) excavating state. Since claim 1 only teaches that the load judging portion determined whether the vehicle is under excavation on the basis of the input from the excavating state detecting means, claim 1 reads on the teaching of Hanamoto in which the

controller determines whether the vehicle is under (or starts) excavation or not based on the position of the pedal and the pressure of the pump.

In response to applicant's argument on page 20, fourth paragraph, in col.16, lines 38-47, Hanamoto clearly teaches that the load judging portion (the controller) determines excavation state of the vehicle on the basis of the detecting amount (the amount of depression of the pedal or the amount of pressure of the pump) inputted from the excavation state detecting means that report the depression state of the pedal and the amount of pressure of the pump (so that the controller can determine if the amount exceed the point J). It is noted that the applicant's statement "load judging portion operates [emphasis added] "on the basis of a detecting amount input from the excavating state detecting means"" is not accurate because claim 1 does not teach that the load judging portion operates on the basis of the detecting amount input from the excavating state detecting means, instead, claim 1 teaches that the load judging portion judges whether the vehicle is under excavation based on the detecting amount input from the excavating detecting means.

In response to applicant's argument on page 20, last paragraph through page 21, lines 1-3, the added structural relationship does not overcome the teaching of Hanamoto, since the controller receive data concerning the position of the pedal 10 and the pressure of the pump, the controller must be operably coupled to the means (the sensors) that sends pedal position and the pump's pressure to the controller.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3661

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-7687, (for formal communications; please mark "EXPEDITED
PROCEDURE")

Or:

(703) 305-7687 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

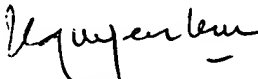
Hand-delivered responses should be brought to Crystal Park V, 2451 Crystal
Drive, Arlington, VA., Seventh Floor (Receptionist).

Art Unit: 3661

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (703) 306-9130. The examiner can normally be reached on Monday-Thursday from 8:00 am to 6:00 pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black, can be reached on (703) 305-8233. The fax phone number for this Group is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.


THU V. NGUYEN
PRIMARY EXAMINER
November 18, 2004